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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/082,824	10/19/2001	Jeffry R. Meyer	ABHS-0169-B970532	3607

7590 07/18/2002

Woodcock Washburn LLP  
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EXAMINER

DONOVAN, LINCOLN D

ART UNIT	PAPER NUMBER
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2832

DATE MAILED: 07/18/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.  
10/082,824

Applicant(s)  
Meyer

Examiner  
Lincoln Donovan

Art Unit  
2832



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on Oct 19, 2001 is/are a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s).  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)  
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 6 6) ☐ Other:

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## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the spacer and mechanism requiring mechanical movement must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 1, 8, 16 and 23, applicant should clarify how the last activation point is to be determined.

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Regarding claim 1, line 7, applicant should clarify the application of electrical current to the armature.

Regarding claim 4, applicant should clarify the step of "separating the end of the armature from the mechanism, prior to applying the electrical current."

Regarding claim 7, applicant should clarify how the mass serves to delay the armature. It is not clear whether applicant intends that a mass is attached to the armature prior to application of the current to the coil.

Regarding claim 12, it is unclear what applicant is intending to claim. The spacer structure and mechanism and their relationship to the solenoid are unclear.

Regarding claim 13, applicant should clarify the extension member. It is not clear whether the member is intended to be the spring shoulder.

Regarding claim 15, It is not clear what applicant intends by the delay member having a mass and its interaction with the solenoid.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 8-11, 13-14, 16-18 and 20-21, as best understood in view of the rejection under 112

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second paragraph, are rejected under 35 U.S.C. 102(b) as being anticipated by Bastle [US 4,008,876].

Bastle discloses a solenoid valve [figures 1-4] comprising:

- a rod-shaped armature [32] having an extension [figures 1-4];
- a shoulder extension [38] on the armature; and
- a biasing spring [36] mounted coaxially about the armature and engaging the shoulder.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 2, 5 and 6, as best understood in view of the rejection under 112 second paragraph, are rejected under 35 U.S.C. 103(a) as being unpatentable over Bastle.

Bastle discloses the instant claimed invention except for the specific method steps.

It would have been obvious that the specific method steps claimed would have been inherent in the product structure.

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8. Claims 3-4, 12, 19 and 23, as best understood in view of the rejection under 112 second paragraph, are rejected under 35 U.S.C. 103(a) as being unpatentable over Bastle in view of Grunert et al. [US 4,713,639].

Bastle discloses the instant claimed invention except for a space between the armature end and the mechanism to be engaged.

Grunert et al. discloses a solenoid controlled armature engaging a mechanism with a space between the armature and member to be engaged [figure 1].

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a space between the armature end and engagement piece in Bastle, as suggested by Grunert et al., for the purpose of providing an impact at engagement.

It would have been obvious that the specific method steps claimed would have been inherent in the product structure.

9. Claims 7, 15 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bastle, as applied to claims 1, 8 and 16, respectively, above and further in view of Harper et al. [US 4,062,052].

Bastle discloses the instant claimed invention except for an additional mass formed with the armature.

Harper et al. discloses the armature being enlarged.

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It would have been obvious to one having ordinary skilled in the art at the time the invention was made to enlarge the armature of Bastle, as suggested by Harper et al., for the purpose of avoiding unwanted motion.

It would have been obvious that the specific method steps claimed would have been inherent in the product structure.

*Conclusion*

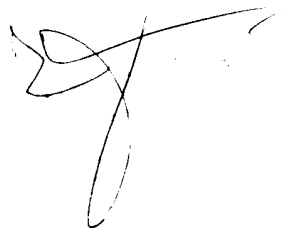
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Lincoln Donovan whose telephone number is (703) 308-3111.

The fax number for this Group is (703)-872-9318.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703)308-0956.

LDD

July 14, 2002

A handwritten signature, likely of the examiner Lincoln Donovan, consisting of a stylized 'L' and 'D' with a horizontal line extending to the right.